

 Topic	Invited Speaker
08:00	Registration / Networking, Coffee and Light Breakfast
09:00	Welcome to MAEBL Gerald Lopez, Ph.D. University of Pennsylvania
09:10	Opening Remarks Mark Allen, Ph.D. Scientific Director, Singh Center for Nanotechnology University of Pennsylvania
09:20	Keynote: Pushing the Limits of Electron Beam Lithography Leonidas Ocola, Ph.D. Argonne National Laboratory
10:00	Getting Started in EBL: Spin Curves, Contrast Curves and Exposure Latitude Gerald Lopez, Ph.D. University of Pennsylvania
10:15	Process Characterization and Alternative Resist Technologies Kevin Lister, Ph.D. University of Delaware
11:00	Break/Continued Discussion and Networking
11:20	Surface Charging Challenges and Mitigation Techniques for Electron Beam Lithography Aimee Price Ohio State University
12:00	Networking Lunch
13:30	Electron Beam Lithography Process Modeling and Throughput Management Chad Eichfeld, Ph.D. The Pennsylvania State University
14:10	Image Processing Applications in Electron Beam Lithography Ernst Kratschmer, Ph.D. IBM - Thomas J. Watson Research Center
14:50	Quick 10 Minute Break/Continued Discussion and Networking
15:00	Pattern Fracture and Electron Beam Lithography of Kinoform X-Ray Lenses Aaron Stein, Ph.D. Brookhaven National Laboratory
15:35	CNST Toolkit: The Nanolithography Toolbox Robert Ilic, Ph.D. National Institute of Standards and Technology
16:10	Networking - <i>Casual Open Forum and Discussion and MAEBL Survey</i>
16:55	Closing Remarks - Announcement of MAEBL 2018 Workshop Venue
17:30 - End Forum	

Free registration: <https://www.eventbrite.com/e/mid-atlantic-electron-beam-lithography-maeb1-workshop-tickets-31096633869>

Dr. Leonidas E. Ocola (Ph.D., University of Wisconsin-Madison, 1996) is a staff scientist at Argonne National Laboratory with more than 25 years of experience in nanofabrication. He received his B.Sc. from the Universidad Nacional de Ingenieria (Lima, Peru) in 1988, his M.Sc. from the University of Wisconsin-Madison in 1991 and his Ph.D. from the University of Wisconsin-Madison in 1996, in physics. After five years at Bell Labs, Lucent Technologies in Murray Hill, Dr. Ocola joined Argonne National Laboratory in 2002 where he was involved with the design, construction and instrumentation procurement of a new DOE funded nanocenter, the Center for Nanoscale Materials.

Dr. Ocola has published over 150 papers, and 1 book and holds two patents. His research interests include electron beam lithography, simulating high-energy electron beam interactions with polymer materials, micro- and nano- fluidic devices, and applications of ALD infiltration in polymers.

Dr. Ocola has been involved with several conference program committees for many years. He served on a National Science Foundation panel on nanotechnology, he has co-chaired the NanoFabrication Symposia held at the Nano Science and Technology Institute (NSTI) NanoTech Conference, he has been a member of the steering committee of the Electron, Ion, Photon Beam Nanofabrication (EIPBN) and Chair and Program Chair of the Executive Committee for the Nanometer-scale Science and Technology Division of the American Vacuum Society.

Dr. Ernst Kratschmer has a Dr.-Ing. (Ph.D.) in electrical engineering from Aachen University in Germany. He is currently the ebeam sector team lead in the Microelectronics Research Lab. at the IBM T. J. Watson Research Center in Yorktown Heights, NY. After two years as a research associate at NRRFSS at Cornell Univ. working on STEM lithography he joined IBM Research in 1986 where he held various positions in Gaussian and shaped beam ebeam tool development before joining the micocolumn development team. He moved on to X-ray mask masking and for a while was involved in the specification, procurement and qualification testing of a number of ebeam lithography tools for research and development. He then took a position supporting ebeam lithography tools and applications for a wide array of projects in physics, biotech, silicon scaling, and novel devices which required high resolution lithography for patterning.

Dr. Chad Eichfeld is a materials scientist specializing in nanolithography. He has been working at the Materials Research Institutes Nanofabrication Facility at PSU since 2010. He recently has taken the position of Director of Operations, overseeing the day-to-day operation of the lab and 10 technical staff. He was awarded a PhD in Materials Science from The Pennsylvania State University as well as earning his BA and MA in Materials Science from PSU. He enjoys pushing the limits of electron beam lithography at work and raising 3 kids with his wife Sarah.

Dr. Rob Ilic is a Project Leader at the Center for Nanoscale Science and Technology at the National Institute of Standards and Technology in Gaithersburg Maryland. His research group interests center around novel measurement systems and measurement methods to interrogate complex nanofabricated architectures, nanostructured dynamical systems, and fluid structure interactions.